

Multimedia Systems

Lecture – 4

By

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Text: Visual Representation

- Text has become a part of our life. It consists of characters, punctuation symbols, etc. to convey a message.
- Text is one of the most imperative components of multimedia and an essential source of presenting information to a wide range of people.
- Proper use of text, keeping in mind elements such as font style, size and various design tools help the content creator to communicate the idea and message to the user.

Fonts and Faces

- Factors affecting legibility of text are as follows:
 - Size and style
 - Background and foreground colours
 - Leading
- A glyph is a graphic representation of a character's shape where a character may be represented by many glyphs.
- A typeface is the design of lettering that include variations in size, weight, slope, width etc.
- A font is a collection of character or glyphs of a single size and style belonging to a particular typeface family.
- Fonts are classified on the basis of spacing between characters, words, presence or absence of serifs, their shape, stretch and weight such as bold or italics.

- The spacing between character pairs is called **Kerning** and the space between lines is called **leading**.

Figure 2.1: Different Types of Fonts

Arial

Arial Black

Comic Sans MS

Courier New

Georgia

Impact

Times New Roman

- **Font size** is measured in points and it does not describe the height or width of its character. This happens because the height of two different fonts (in both upper and lower case) may differ.
- One point is approximately $\frac{1}{72}$ of an inch i.e., 0.0138.

Figure 2.2: Examples of Different Fonts and Font Sizes

There are three main stages of a multimedia project.

Lucida Handwriting 12 point

There are three main stages of a multimedia project.

Kristen ITC 10 point

**THERE ARE THREE MAIN STAGES
OF A MULTIMEDIA PROJECT.**

Big Truck 18 point

There are three main stages of a multimedia project.

Microsoft Sans 8 point

Example: Times New Roman, Bodoni, Bookman are some fonts which come under **serif** category.

Arial, Avant Garde, Verdana are some examples of **sans serif** font.

Figure 2.3: Examples of Serif, Sans Serif and Decorative Fonts

Bodoni

Interactive multimedia is called hypermedia.

(This is a serif font. In this font, a line or curve extension from the end of a letter. Serif fonts are best used for body text.)

Avant Garde

Interactive multimedia is called hypermedia.

(This is a sans serif font. There are no extensions in this font. Sans Serif fonts are best used for titles.)

Matura M7 Script

Interactive multimedia is called hypermedia.

(This is a decorative font. These fonts are stylish and formal and are best used for emphasis.)

Selecting Text Fonts

There are a few things that a user must keep in mind before selecting fonts for a multimedia presentation.

- Choose a font that is legible and easy to read.
- The different effects and colours of a font can be chosen to make the text look distinctive.
- Try to use few different colours within the same presentation.
- Try to use few typefaces within the same presentation. Play with the style and size to match up to the purpose and importance of the text.
- Drop caps and initial caps can be used to accent the words.
- To attract instant attention to the text, the words can be wrapped onto a sphere or bent like a wave.
- In case of text links (anchors) on web pages the messages can be highlighted.
- Meaningful words and phrases can be used for links and menu items.
- Overcrowding of text on a single page should be avoided.
- Do not use decorative passages for longer paragraphs.

Using Text Elements in a Multimedia Presentation

The text elements used in multimedia are given below:

- **Menus for Navigation**

- A user navigates through content using a menu.
- A simple menu consists of a text list of topics.

- **Interactive Buttons**

- A button is a clickable object that executes a command when activated.
- Users can create their own buttons from bitmaps and graphics.
- The design and labelling of the buttons should be treated as an industrial art project.

- **Fields for Reading**

- Reading a hard copy is easier and faster than reading from the computer screen.
- A document can be printed in one of two orientations - portrait or landscape.

- **HTML Documents**

- HTML stands for Hypertext Markup Language which is the standard document format used for Web pages.
- HTML documents are marked using tags.
- Some of the commonly used tags are:
 - The tag for making text bold faced.
 - The tag for creating an ordered list.
 - The tag for inserting images.

- **Text Layout**

- While creating a multimedia presentation, the presenter should plan the text layout to let a reader read it with ease.
- The length of the text should neither too long nor too short.
- For a printed document, a line containing 13 to 17 words is sufficient.
- The next point of concern is the consistency of pages. The designer has to make sure that the pages should be of same size.

Figure 2.4: Example of Good and Poor Page Layout

This passage contains biographical information about a NASA engineer who died.

It is taken from a NASA press release.



Owen Eugene Maynard

Owen Eugene Maynard, who died on July 15 at age 75, was an outstanding leader of the Apollo program and one of Canada's great space flight pioneers.

In 1960, Maynard was part of the small group of engineers at NASA's Space Task Group, which grew into today's Johnson Space Center, when he was assigned to a new human space flight program called Apollo that at the time had no specific goal or even authorization to proceed. Working under the direction of leading lights at NASA such as Robert Gilruth, Max Faget and Caldwell Johnson, Maynard helped sketch out the initial designs of what would become the Apollo Command and Service Modules. The following year, when President John F. Kennedy gave Apollo the goal of landing on the Moon, Maynard became involved in the debates that raged within NASA over how Apollo would fly to the Moon.

A little more than a year after Kennedy's call to land on the Moon, NASA had settled on sending astronauts to the Moon and bringing them back home by a method known as lunar orbit rendezvous or LOR. This method was championed within NASA by John Houbold, but Maynard was among the first at the Space Task Group to see the wisdom of using LOR to fly to the Moon at a time when other methods were favored.

Another Canadian, James A. Chamberlin, had been converted to LOR and proposed landing an astronaut on the Moon using a Gemini spacecraft and a lunar "bug." Following Chamberlin's lead, Maynard began making the first serious sketches within NASA of what would become known as the Lunar Module. Maynard's conception of the LM was used by STG to help sell the idea of Lunar Orbit Rendezvous around NASA.

By 1963, Maynard was chief of the LM engineering office in the Apollo Program Office at the Manned Spacecraft Center in Houston. Work on building the LM was already underway at the Grumman Aircraft Engineering Corp. in New York, where Thomas J. Kelly was leading the engineering effort. Kelly, who today is



Apollo 11 LM (Lunar Module)

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- The distance between two lines should be adjusted to a suitable value to increase readability.
- Ensure that the leading is not too small as then the text will be hard to read.

Figure 2.5: Effects of Different Leadings

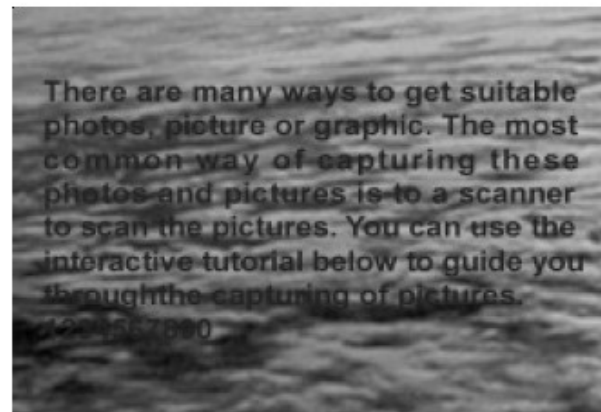
Tight If your software allows you to change the leading (the distance between two text lines), you should adjust it to a suitable value.

Normal If your software allows you to change the leading (the distance between two text lines), you should adjust it to a suitable value.

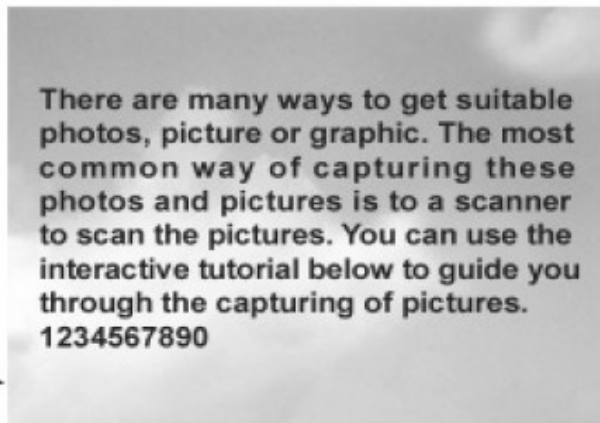
Loose If your software allows you to change the leading (the distance between two text lines), you should adjust it to a suitable value.

- The other one of the most common errors people make is while choosing the **background colour**. Using a background colour too close to the text or a background image highly in contrast to the text which makes the text difficult to read.

Figure 2.6: Use of Colour and Background



← Bad



Good →

Use of Text in Webs

- Using text in websites attract a visitor's attention as well as help him in understanding the webpage better.
- It is far better than the use of meaningless graphics and images which do not contribute in understanding of the page.
- **Website Loading Speed:** A website which contains a lot of text loads faster than the websites that contains a lot of images and graphics, audio and video clips on the page.

Text in Films

- Most films start with titles and end with credits.
- Typography look different in different formats such as a in film subtitles, on websites, poster etc.
- While designing subtitles, a film maker will need to keep in mind that moving images interact with the top layer subtitles.
 - E.g. If subtitles are white and rest on top of a similar white tone in the image, the text will be difficult and impossible to read. To ensure this does not happen, a black outline around text should be used. Now the text will be viewable even against common black and white backgrounds.

Text in Advertisements

- Since the text ads are more of keyword oriented, they draw more attention than banner advertising.
- The text ads are inexpensive, thus making it affordable and effective for your business.
- There are a few websites which offers a flat free rental services to place your text based advertisements.
- The foremost benefit of having text based advertisements is that it helps in improving your search engine ranking.